

as is used in blood vessel work; this suture is a continuous one and is only passed through the upper layers of the epiderm. Perfect approximation of the skin is obtained without any suture markings; this suture does not need to be removed, as it falls off with the desquamation of the skin in a few days.

Dr. G. Franklin Shiels: Two points I have noticed to be of some value in handling these operations: (1) to stop the motion of the face, as in crying, etc., after operation—the best way to do is to make an incision at the junction of the buccal and maxillary mucous membrane and loosen up the whole of the face tissues from the underlying bone, so that you can move them freely at the time of operation and have less post-operative strain and motion during healing; (2) in regard to keeping the child quiet, one-grain doses of chloral keep the child restful. Chloroform is the anesthetic of choice, and chloral after operation is a producer of quiescence.

Dr. Harry M. Sherman, closing discussion: This knife, which Dr. Barbat showed, is very nice, although a little large. I prefer the Politzer knife, which is a little smaller, curved, and designed to puncture a hole in the drum membrane. When a Politzer knife has been ground down a little and is smaller than it was originally, it is about the right size for splitting the soft palate and uvula.

I have avoided that gag of Mr. Lane's because of those needle points which cut through the gum and which must go close to the follicles of unerupted teeth. I quoted Goyder when I spoke in criticism of the Lane technic; he says it spoils the teeth if the flap is taken from the alveolar processes and outside of them. Teeth are becoming more and more important to us as we find how they are needed in mastication, and how on infected mouths are based a great many pathological processes which continue during life.

The anesthetic is ether. I have had casualties, fatalities, in children with chloroform, and I do not see any reason for anybody using it. Children take ether just as well. The ether is given by a catheter in the nose, through which is blown air, ether saturated. The anesthetist sits with one hand on the pulse and one foot going quietly on a little foot bellows, giving a little stream of air and ether. When you put that catheter into the nose, put it in a measured distance and stitch it to the septum. If you do not stitch it, it may drop out or slip in too far.

As regards position, there is a little shelf on the operating table which hangs down from the end. The child's head lies on that so that it is very easy to see the whole of the hard palate. The child is surrounded by black towels and the mouth is in high light. If white towels are used the mouth is in shadow and you cannot see into it as well. It was on a cleft palate child that I first got the idea of using a black environment for the operation field.

The suture material is horsehair, of course, and it is always used double. In that way you get a stronger thread and one that will hold better in the tissues.

Mr. Goyder says the Langenbeck operation is not practical in little children, and is a mistake. So far as the size of the child is concerned, the Langenbeck would do as well as the Lane, I think. As a matter of personal experience, I never found a child with so small a palate and so wide a cleft but what I could do the Langenbeck operation.

These children must not be kept in a part of the hospital where suppurative cases are going on; they must not be handled by nurses who are giving enemata, who are washing other children and dressing their wounds. They must be taken care of by people not handling sepsis. I have found it not a bad plan to take the child to the hospital for operation, then send it home to convalesce in the environment to which it was accustomed, and let the mother bring it to the office for dressings.

The question of infection is a very important one. Eastman last year called attention to the necessity for plenty of blood in the flap in order to get union. I have left the flap to the mercy of the anterior palatine artery and ascending pharyngeal artery, and they keep the flap well nourished so that union will occur.

Dr. Levison is right about the little space at the front end of the cleft. It is a difficult thing to close it, and if it is not well closed there may be a leak of fluids up into the nose. I have filled in a piece from the cheek, and it is very curious to see how, after that has been done, there is a vivid flap in a pallid environment, because the mucosa of the lip is a deeper red than that of the hard palate. I do not see how Mr. Lane closes this place with his technic and especially when the projecting intermaxillary bone is in the way.

Finally, the man doing cleft palate operations must make up his mind to a high average of disappointments. The tissue used is thin and delicate and in a potentially septic environment. Usually sutures hold well about four days, and then those at the junction of the soft and hard palates begin to give way and a hole forms. When this occurs one may re-anesthetise and put in fresh sutures, but they go, under these circumstances, into tissue that is edematous and sleazy, and rarely hold well. Really it is just as well to let the condition take its own course and be content with the amount of healing gained at that operation, even though it be small. If there has been no trimming of the cleft edges no tissue is lost and secondary sutures may succeed when the primary have failed. The healing that you finally get after disappointments is a reward of patient merit; and that which happily comes at the first operation is a distinct blessing, and it does come so, though not as often as one would wish.

BOOK REVIEWS

Principles and Practice of Obstetrics. Second Edition. By Joseph B. DeLee, A. M., M. D., Professor of Obstetrics at the Northwestern University Medical School. Large octavo of 1087 pages, with 938 illustrations, 175 in colors. Cloth, \$8.00 net; half Morocco, \$9.50 net.

This large compend of obstetrics is profusely illustrated and systematically arranged to meet the needs of the busy general practitioner. The volume is attractive for undergraduates, but is too extensive for them to read thoroughly in the crowded curriculum of the modern medical school. The short bibliography at the end of each chapter will prove of some aid to men who desire to prepare themselves for a serious study of obstetrical problems, and will tend to lead them to the more complete references of the German texts.

A. B. S.

General Medicine. Edited by Frank Billings and J. H. Salisbury. Volume VI of Practical Medicine Series 1915, The Year Book Publishers, Chicago. 1915. Price \$1.50.

This volume presents, among other things, an exceptionally valuable digest of practically all the important work of the year on gastro-intestinal subjects and well repays reading for this one part alone.

Especially well worked up are the sections on the chemical, microscopical and radiographic methods of gastric and intestinal analyses.

G. H. T.

Manual of Vital Function Testing Methods and Their Interpretation. By Wilfred M. Barton, M. D., Boston. Richard G. Badger, 1916. Price, \$1.50.

Not long ago, following the rapid advances in our knowledge of pathology, it was the great effort